

SEMINAR

Novel Ways to See More: Polarized Active Remote Sensing

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Polarization is the phenomenon in which waves of electromagnetic radiation are restricted in direction of vibration. The only reason polarization state is worth contemplating is that two beams of radiation, otherwise identical, may interact differently with matter if their polarization states are different. Thus, observing the polarization of scattered light in the atmosphere provides a unique way to probe clouds, precipitation and aerosol. In this seminar we will review polarized active remote sensing and how these techniques may be used to explore the atmosphere in novel ways. We will then specifically discuss the application of polarized lidar to observe clouds over the top of the Greenland Ice Sheet and the use of NCAS's new Mobile Dual Polarization Doppler radar to observe mixed phased clouds and precipitation in Africa.

Friday, February 24, 2017, 3:30 p.m.

Refreshments 3:15 p.m.

NCAR Foothills Laboratory
3540 Mitchell Lane, Boulder, CO 80301
FL2-1022, Large Auditorium

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